

Military Sealift Command, Government Operations Safety Management System



Endorsed by: ISM Steering Committee

Approved by: Date: 17 March 2008

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Loading Cargo Fuel & Cargo Lube Oil

1 PURPOSE

To minimize the risks associated with loading hazardous liquid cargo on board MSC ships.

2 APPLICABILITY: Current release date: January 2021

J.R. Taylor, Director

Used Oil & Oily Waste Handling is addressed in SMS Procedure 7.4-002-ALL

Bunkering (from Shore) & Ship's Lube Oil is addressed in <u>SMS Procedure 7.4-004-ALL</u>

Oil Spill Incident Response is covered under SMS Procedure 8.18-001-ALL

3 BACKGROUND & PROCEDURES

3.1 Safety Precautions:

Any person may stop cargo operations if a safety concern exists. Only the shipboard PIC may restart cargo operations.

3.1.1 Fire screens for ullage ports and vents shall be inspected for tears and corrosion. Fire screens should remain in ullage ports between soundings.

- 3.1.2 Throughout cargo handling operations, pump room ventilation must be kept continuously running.
- 3.1.3 It is the responsibility of the terminal to provide hoses which are in good condition. The Master may reject any hoses that appear damaged or defective.
- 3.1.4 Hoses shall be lifted with a sling or lifting bridle. Steel wires shall not come into direct contact with hose. If necessary, the hose shall remain supported by the whip and preventers through the duration of the evolution. Care should be taken to avoid crimping the hose.
- 3.1.5 Gaskets shall be inspected when connecting cargo hoses or metal cargo arms.
- 3.1.6 Drip pans and spill kits shall be located at each transfer station.
- 3.1.7 The Cargo Mate shall ensure the Oil Record Book is updated and all information required for log preparation forwarded to the watch Officer.
- 3.1.8 Per recommendations from OCIMF point paper on Emergency Tow-off Pennant Systems (ETOPS), also known as fire warps or fire wires, ETOPS are no longer required to be deployed. However, at the discretion of the Master or if the marine terminal requires ETOPS then a mooring line will be used in place of wire rope.

3.2 General Procedures:

- 3.2.1 A cargo transfer plan shall be prepared by the Cargo Mate, approved and signed by the Master, and promulgated to all personnel involved in the transfer. It shall include, but is not limited to:
 - Person in Charge
 - Volume of cargo to be transferred
 - Tanks
 - Topping off procedure, tank order, and tank levels
 - Overflow tank
 - Hose connections and locations
 - Anticipated flow rates and duration of evolution
 - Communications between persons conducting transfer
 - Emergency shutdown and spill notification.

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- 3.2.2 The Cargo Mate shall calculate flow rate and completion times for loading tanks.
- 3.2.3 The shore Person in Charge (PIC) shall be notified when the ship commences topping off of tanks.
- 3.2.4 A stability calculation shall be performed for the load plan to ensure all vessel stability requirements have been met.
- 3.2.5 The Loading Cargo Fuel & Cargo Lube Oil Checklist, SMS Checklist <u>7.4-006-01-AO</u> shall be used for loading / discharging of cargo fuel / cargo lube oil to a terminal or barge.
- 3.2.6 On the day of transfer, the PIC shall complete the Declaration of Inspection (DOI) provided by the facility. If no DOI is provided, complete the Declaration of Inspection, Checklist 7.4-001-01-ALL. The original must be kept aboard and a copy provided to the terminal supervisor or representative.

<u>Declaration of Inspection – Shoreside Signature in a Foreign Port</u>

If the Person in Charge (shore) refuses to sign the Declaration of Inspection (DOI), the ship shall note in the Official Log that a completed DOI was presented and the shore PIC refused to sign. Provided the Master is otherwise satisfied that the transfer can be safely completed without risk of spills or other incidents, the ship may proceed with the discharge, without shoreside PIC signature.

- 3.2.7 The Watch Officer shall, as a minimum, take hourly drafts and monitor the mooring lines. Lines should be tended regularly. Especially, when moored near frequently trafficked shipping lanes and during times of rapidly changing weather.
- 3.3 Loading Procedures:
 - 3.3.1 The PIC shall confirm line-up and request permission from the Master to commence loading.
 - 3.3.2 Loading shall commence at minimum pressure. Personnel shall confirm that there are no leaks and verify fuel receipt in the appropriate tanks.
- 3.4 Requirements when transferring / receiving at sea: Samples are not required to be taken by the transferring ship.

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- 3.4.1 Ships receiving bunkers shall use the sample procedures in <u>SMS</u> Procedure 7.4-004-ALL, Bunkering (from Shore) & Ship's Lube Oil, Section 3.8.
- 3.5 Bunker Delivery Note (BDN):
 - 3.5.1 Ships shall not receive a BDN from the terminal when loading cargo fuel.
 - 3.5.2 When transferring cargo fuel to another ship, a BDN shall be provided to the receiving ship using SMS Form 7.4-005-02-ALL, Bunker Delivery Note (BDN).
 - 3.5.3 A BDN shall be provided when conducting an internal transfer from cargo fuel to bunkers.
 - 3.5.4 Fuel transferred during a consolidation does not require a BDN.
- 3.6 Cargo lube oil shall be loaded in accordance with sections 3.1 through 3.3.
- 3.7 MSC vessels may load Marine Gas Oil (MGO) to support a contingency operation or exercise if a Cargo MGO Waiver is received. The procedures for requesting a waiver is contained in Message 201449Z Apr 10, <u>Cargo MGO Waiver Request Policy Guidance for MSC</u>.

4 RECORDS & REPORTS

- 4.1 The Declaration of Inspection (DOI), <u>Checklist 7.4-001-01-ALL</u> shall be kept on board for 1 year.
- 4.2 The Loading Cargo Fuel Checklist, SMS Checklist <u>7.4-006-01-AO</u> shall be kept on board for 1 year.
- 4.3 Oil Record Book for Ships, USCG CG-4602A (Rev. 11-16)

5 REFERENCES

- 5.1 International Safety Guide for Oil Tankers and Terminals (ISGOTT), 5th Edition
 - 5.2 NSTM Chapter 541, Ship's Fuel and Fuel Systems (DFM).
 - 5.3 NSTM Chapter 542, Gasoline and JP5 Fuel Systems.

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- 5.4 SMS Procedure 7.4-002-ALL, Used Oil & Oily Waste
- 5.5 <u>SMS Procedure 8.18-001-ALL, Oil / Hazardous Substance (OHS) Spill Response</u>
- 5.6 <u>Emergency Tow-off Pennant Systems (ETOPS)</u>
- 5.7 SMS Procedure 7.4-004-ALL, Bunkering (from Shore) & Ship's Lube Oil
- 5.8 SMS Form 7.4-005-02-ALL, Bunker Delivery Note (BDN)
- 5.9 Message 201449Z Apr 10, <u>Cargo MGO Waiver Request Policy Guidance</u> for MSC
- 5.10 NAVSUPINST 4026.1 Fuel Management and Accounting Afloat Directive

6 **DEFINITIONS**: None

7 REVISIONS:

Original	17 Mar 2008
Rev 0.1	23 Oct 2008 – Section 3.5 changed to reflect updated sampling
	Requirements.
Rev 0.2	27 May 2009 – Corrected sampling requirements in Section3.4.
Rev 0.3	03 Mar 2010 – Added paragraph 3.1.8 on ETOPS
Rev 0.4	10 Jun 2010 – Revised sections 3.4 and 3.5
Rev 0.5	16 Apr 2012 – Added paragraph 3.7 on requesting an MGO waiver
Rev 0.6	10 Dec 2014 – Added reference 5.10
Rev 0.7	20 Dec 2017 – Added yellow box in paragraph 3.2.6 for
	consistency with SMS Procedure 7.4-002-ALL. Added Records
	and Reports 4.3 to current version of Oil Record Book.
Rev 0.8	23 Feb 2021 – Changed SMS Procedure number from 8.18-001-
	SQ to 8.18-001-ALL in paragraph 5.5. Added SMS Procedure
	titles in paragraph 5.4 and 5.5.

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